

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000513**Date Inspected:** 25-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Xu Bing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** 114 Skin A & E**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the welding of the Caltrans Mock-up #77.00 and #114.00, for the San Francisco Oakland bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector observed ZPMC shop personnel performing Shielded Metal Arc Welding (SMAW) at Mock-up #114.00 Skin Plate A sub assembly MA106 longitudinal stiffener repair welds. Sub assembly MA106 was positioned vertically in the shop pit for weld repair. ZPMC welder Guo Dengyun was performing Flux Cored Arc Welding (FCAW) on Sub assembly weld # 5 to WPS-345-FCAW-1G (1F). ZPMC QC Xu Bing Monitored welding operations of Mock-up #114.00 Skin E sub assembly MA109 CJP weld # 8. The following welding variables were recored by Caltrans QA on weld # 8, amps 302, volts 31.2, a welding speed of 315 mm/ min and a heat input of 1.79 kj/mm. Caltrans QA observed ZPMC shop personnel preparing excavation areas for welding on Mock-up 77.00 Skin A sub assembly MA2. The following picture below illustrates # 77.00 Skin A Weld # 3 excavation area. Mr. Xu Bing stated, the welding was performed in accordance to WPS-B-T-2232-TC-U5-F.

The Caltrans QA Inspector monitored welding operations of #114.00 Skin A and E. Caltrans QA Inspector observed that the welding operations appeared to be in general conformance with AWS D1.5 2002 requirements.

WELDING INSPECTION REPORT

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Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
